

Remarks

Claims 1, 10-11 and 15 have been amended. Claims 2-3 and 12-13 have been canceled and claims 18-21 have been added.

The Examiner has rejected applicant's claims 1-3, 10-13 and 15 under 35 USC 102(e) as being anticipated by the Seong patent (U.S. 6,785,720). Applicant has amended applicant's independent claims 1 and 11, and with respect to these claims, as amended, and their respective dependent claims, the Examiner's rejection is respectfully traversed.

Applicant's independent claim 1 has been amended to better define applicant's invention. More particularly, amended claim 1 now recites a communication control apparatus comprising: a first connection unit which connects to a first segment of a network; a second connection unit which connects to a second segment of the network; a CIP header detecting unit configured to detect whether an isochronous packet received by said first connection unit includes a CIP (common isochronous packet) header conforming to IEC 61883 standard; and a control unit configured to determine, using the CIP header, whether to disable relaying the isochronous packet received by said first connection unit to said second connection unit, wherein said control unit controls to provide another isochronous packet including dummy data or null data to said second connection unit in lieu of the isochronous packet received by said first connection unit, if said control unit determines that relaying the isochronous packet received by said first connection unit to said second connection unit is disabled. Claim 11 has been similarly amended.

In light of the Examiner's comments in the Action applicant has again thoroughly reviewed the Seong patent and applicant's disclosure and the amended claims and believes that the Seong patent does not teach or suggest applicant's invention of such claims. In particular, in

reviewing the Examiner's rejection, the Examiner has equated the set-top box in the Seong patent to applicant's claimed communication control apparatus and argued that it includes a first port which connects to a first segment of a network and a second port which connects to a second segment of the network. To support this argument the Examiner relies on column 1, lines 21-26 and 46-53, of the Seong patent and states generally for each port "connection between devices."

However, column 1, lines 21-26, of the Seong patent merely mention the term "set-top box" and disclose no specific details of such a box and its interconnections. Moreover, column 1, lines 46-53, of the Seong patent merely describe generally use of the IEEE 1394 and the IEC 61883 specifications in interconnecting devices. Again, there is nothing in these lines which describe the details of a set-top box and its interconnections.

The Seong patent does show a set-top box in FIG. 3 as the SET-TOP BOX 320. In particular, in this figure, the only connection line for the SET-TOP BOX 320 is the line to the IEEE 1394 bus. Moreover, the entire description in the patent concerning the SET-BOX 320 deals with connecting the SET-TOP BOX to the DTV 300 (see, e.g., column 4, lines 11-21 and 29-41; column 4, line 49 - column 5, lines 12). This is also true of some of the portions of the Seong patent cited by the Examiner in applying the patent to applicant's claims (e.g., column 5, lines 47-67; FIGS. 6-7; column 4, line 65-column 5, line 6). Furthermore, the other portions of the Seong patent cited by the Examiner deal generally with connections using the IEEE 1394 and IEC 61883 specifications (e. g., column 1, line 46 - column 2, line 10; column 1, lines 24-53; column 1, lines 61-66; column 2, lines 42-49).

There is, therefore, nothing taught or suggested in the Seong patent of a first connecting port of the SET-TOP BOX 320 connected to a part of the IEEE 1394 bus and a second connecting port of the SET-BOX 320 connected to a second part of the IEEE 1394 Bus. Nor is

there anything taught or suggested in the patent of a control unit in the set-top box configured to control flow of packets between these ports. Applicant's have further clarified these distinctions from the Seong patent in applicant's amended claim 1 by replacing the term "port" with the recitation connection unit and by reciting that the control unit as a "control unit configured to determine . . . whether to disable relaying the isochronous packet received by said first connection unit to said second connection unit."

Furthermore, in spite of the Examiner's arguments to the contrary and the general description in the Seong patent as to the CIP header, and as set forth more fully below, it is not believed that the Seong patent teaches use of the CIP header to control the transfer of an isochronous packet in the set-top box of the Seong patent. Thus, applicant's recitation of "a control unit configured to determine, using the CIP header, whether to disable relaying the isochronous packet received by said first connection unit to said second connection unit", further patentably distinguishes applicant's amended claims over the Seong reference. The additional recitation of "wherein said control unit controls to provide another isochronous packet including dummy data or null data to said second connection unit in lieu of the isochronous packet received by said first connection unit, if said control unit determines that relaying the isochronous packet received by said first connection unit to said second connection unit is disabled", additionally patentably distinguishes over the Seong patent.

Applicant further submits with respect to the Examiner's arguments as to the use of the CIP header in the Seong patent as follows.

As the Examiner points out, the Seong patent discloses use of the IEEE 1394-1995 and IEC 61883 specifications. More particularly, the IEEE 1394-1995 specification is specified as broadcasting an isochronous packet, while the IEC 61883 specification is specified as managing

an isochronous connection between an input device and an output device by using IPCR and OPCR.

Yet, the isochronous connection specified by IEC 61883 is merely a logical connection. That is, even if the isochronous connection is set between the input device and the output device, the isochronous packet output from the output device is going to be broadcasted, and, therefore, relayed to all the devices on IEEE 1394 Bus.

For example, an isochronous packet output from SET-TOP BOX 320 will be relayed to all the devices on IEEE 1394 Bus (DTV 300 and DVCR 310). If there is an isochronous connection set between the SET-TOP BOX 320 and DTV 300, it is possible for the DTV 300 to receive the isochronous packet output from SET-TOP BOX 320. Yet, the isochronous packet output from SET-TOP BOX 320 is going to be broadcasted, and, therefore, relayed to all the devices on the IEEE 1394 Bus including the DTV300. Accordingly, merely using the IEEE 1394-1995 and IEC 61883 specifications cannot and does not permit selectively determining whether to relay the isochronous packet output from the output device, by using a CIP header included in the isochronous packet.

Accordingly, even though the Seong patent discusses a use of the IEEE 1394-1995 and IEC 61883 specifications, this is not in and of itself a teaching or suggestion, as above-stated of “a control unit configured to determine, using the CIP header, whether to disable relaying the isochronous packet received by said first connection unit to said second connection unit, wherein said control unit controls to provide another isochronous packet including dummy data or null data to said second connection unit in lieu of the isochronous packet received by said first connection unit, if said control unit determines that relaying the isochronous packet received by

said first connection unit to said second connection unit is disabled", as recited in applicant's amended claims.

Applicant notes further that the features recited in applicant's newly added dependent claims 17-21 also are not taught or suggested by the Seong patent.

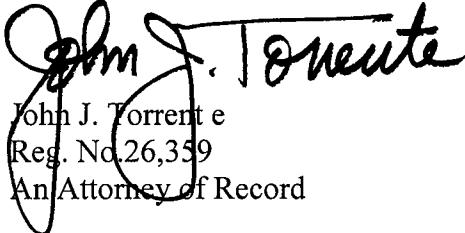
In view of the above, it is submitted that applicant's claims, as amended, patentably distinguish over the cited art of record. Accordingly, reconsideration of the claims is respectfully requested.

Applicant further notes that applicant has filed concurrently herewith a Request for Telephone Interview asking the Examiner to telephone applicant's undersigned attorney to arrange for a telephone interview in the event the Examiner is not disposed to allow the application.

Dated: December 31, 2007

Respectfully submitted,

COWAN, LIEBOWITZ & LATMAN, P. C.
1133 Avenue of the Americas
New York, New York 10036
T (212) 790-9200


John J. Torrente
Reg. No. 26,359
An Attorney of Record